

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Bovano of Cheshire

Connecticut State Technology Extension Program

Bovano Of Cheshire Makes Progress On The Road To Lean Transformation

Client Profile:

Bovano of Cheshire is a 50 year-old company known for its skillfully crafted replicas of nature. Located in Cheshire, Connecticut, the company employs 40 people.

Situation:

Bovano of Cheshire got involved with the Connecticut State Technology Extension Program (CONNSTEP), a NIST MEP network affiliate, four years ago when the company's president read an article about lean in CONNSTEP's Advantage newsletter. He was motivated to recharge the company's continuous improvement efforts and contacted CONNSTEP to find out more. Since that first meeting, Bovano and CONNSTEP have worked together to drastically reduce lead times, energy usage, and hazardous waste output while improving processes.

Solution:

CONNSTEP launched Bovano's lean transformation journey by providing initial training (facilitated by Bill Kirchherr, a CONNSTEP lean partner) in lean basics for all of the company's employees. Employees learned the concepts and implementation techniques of lean.

One of the first projects CONNSTEP conducted at Bovano was the installation of an exhaust system, which led to renovations that opened the production area into a more efficient and comfortable space. More lean techniques applied throughout the facility have reduced lead time, improved efficiency, saved energy, and improved working conditions.

For 45 years, Bovano had been relying on a batch production method, making thousands of each part at a time. However, the company was beginning to find this method wasteful and too time-consuming. CONNSTEP helped Bovano establish a one-piece flow production method, in which all the parts for a particular design are produced at the same time. The parts are cut on the same piece of metal and go through the production process together. Now it is typical to create five or six pieces at once, enabling the company to produce and ship an order within two to three days instead of six to eight weeks. With this kind of lean implementation, Bovano has almost eliminated in-process inventory. CONNSTEP also standardized the company's raw materials system to improve productivity and reduce time spent looking for materials, and streamlined the chemical milling process (with the help of a chemical engineer) to reduce hazardous waste and save the costs associated with disposal. CONNSTEP

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cross-trained Bovano's employees so that any member of the team can step in to alleviate a production back-up in any area. With CONNSTEP's help, Bovano also automated its furnace loading process, thereby doubling production capacity and creating a safer, healthier workplace environment for its employees while saving energy.

Results:

Reduced the number of footsteps taken to complete each task by one-quarter mile.

Saved between \$12,000 and \$15,000 a year in waste removal charges.

Reduced milling process time by one-third.

Designed, produced, and installed custom-made automated furnace loaders, effectively doubling production capacity.

Anticipating a 25 to 30 percent energy savings as a result of furnace automation.

Received a 30 percent rebate for the furnace loaders through Northeast Utilities' Conservation Load Management Fund.

Testimonial:

"Lean gives us new hope. Our whole operation is much more efficient with it and I am so pleased by it. I can see that we will be a much stronger company with lean."

Jim Flood, President